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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/645,484

08/22/2003

Hitoshi Nishimura

500.37529CC3

8733

20457

7590

12/28/2004

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ARLINGTON, VA 22209-9889

EXAMINER
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RODRIGUEZ, WILLIAM H

ART UNIT	PAPER NUMBER
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3746

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/645,484

Applicant(s)

NISHIMURA, HITOSHI

Examiner

William H. Rodriguez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2 and 3 is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

This office action is in response to the amendment and remarks filed 9/23/04. Since the examiner has applied new grounds of rejection, this office action is being made non-final to afford the applicant the opportunity to respond to the new grounds of rejection.

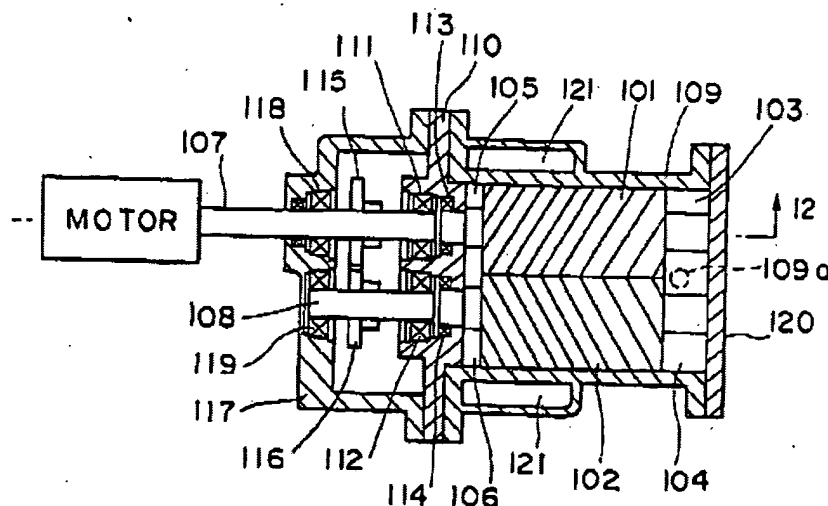
***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Ozaki et al. (U.S. 5,674,063)** in view of **Yoshimura (U.S. 6,652,250)**.

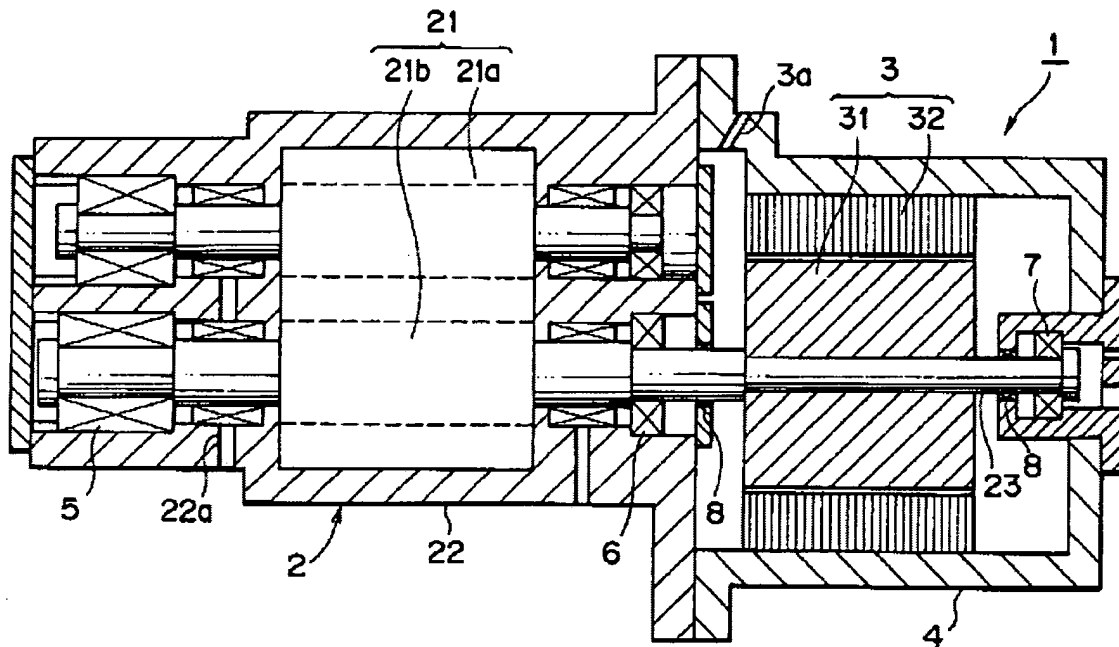
Fig. 11



**Ozaki** teaches a screw compressor comprising: a compressor main body having a male rotor 101 and a female rotor 102 which are received in a casing a meshed with each other, first and second bearings 111, 112 for supporting the male rotor and the female rotor, and a high speed motor driven by a high frequency inverter 202, said high speed motor having a motor shaft in which the motor rotor is formed. **Ozaki** does not schematically show the details of the motor and thus it does not schematically show a third bearing for rotating and supporting the motor shaft. However, **Yoshimura** teaches a screw compressor similar to **Ozaki** comprising a compressor main body having a male rotor 21b and a female rotor 21a which are received in a casing a meshed with each other, first and second bearings 5, 6 for supporting the male rotor and the female rotor a high speed motor, said high speed motor having a motor shaft in which the motor rotor is formed, and a third bearing for rotating and supporting the motor shaft. Thus, as taught by **Yoshimura** a typical motor driving this type of compressor includes bearings for rotating and supporting the motor shaft. Accordingly, it is obvious (if not inherent) that **Ozaki's** motor comprises bearing(s) for rotating and supporting the motor shaft. Further, neither **Ozaki** nor **Yoshimura** teaches that the first, second and third bearings are made the same with respect to each other. However, optimization of the size of the bearings was within the level of one of ordinary skill in the art. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified **Ozaki-Yoshimura** such that the first, second and third bearings are made the same with respect to each other because such a modification would have been considered a mere design optimization which fails to patentably distinguish over **Ozaki-Yoshimura**. See particularly **Figure 11**, column 6 lines 6-8 of **Ozaki**; and **Figure 1** of **Yoshimura**.

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3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Yoshimura** (U.S. 6,652,250).



**Yoshimura** teaches a screw compressor comprising: a compressor main body having a male rotor 21b and a female rotor 21a which are received in a casing a meshed with each other, first and second bearings 5, 6 for supporting the male rotor and the female rotor, and a high speed motor 1 driven by a high frequency inverter (inherent in this type of system), said high speed motor having a motor shaft in which the motor rotor is formed; and a third bearing 7 for rotating and supporting the motor shaft. **Yoshimura** does not teach that the first, second and third bearings are made the same with respect to each other. However, optimization of the size of the bearings was within the level of one of ordinary skill in the art. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified **Yoshimura** such that the first, second and third bearings are made the same with respect

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to each other because such a modification would have been considered a mere design optimization which fails to patentably distinguish over Yoshimura. See particularly **Figure 1** of Yoshimura.

***Allowable Subject Matter***

4. Claims 2 and 3 are allowed (a terminal disclaimer was filed).

***Response to Arguments***

5. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

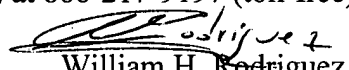
***Contact information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Rodriguez whose telephone number is 571-272-4831. The examiner can normally be reached on Monday-Friday 7:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl J Tyler can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
William H. Rodriguez  
Examiner  
Art Unit 3746